



STATEMENT OF BASIS

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BAQ Engineering Services Division
2600 Bull Street, Columbia, SC 29201
Phone: 803-898-4123 Fax: 803-898-4079

Company Name: Magna Sign International, LLC
Permit Number: CM-1560-0140

Permit Writer: Mareesa Singleton
Date: May 12, 2009

DATE APPLICATION RECEIVED: April 27, 2009

DATE OF LAST INSPECTION: May 15, 2008; No Violation

FACILITY DESCRIPTION Magna Sign Corporation (Magna) makes signs by bending and forming plastic mold onto metal frames. The signs are then spray painted. No emissions are expected from the plastic molding process.

PROJECT DESCRIPTION Conditional Major Operating Permit Renewal

SOURCE DESCRIPTION

OP ID	Equip ID	Equipment Description	Installation Date	Control Device ID	Stack ID
01	Paint Booth No.1	Paint Booth No.1 - Used to spray paint molded plastic signs	2000	Filt1	Paint Booth No.1

CONTROL EQUIPMENT

Control Device ID	Control Device Description	Installation Date	Pollutant Controlled	Efficiency Capture	Efficiency Removal
Filt1	Envira-Max Exhaust Filter - Two piece Styrofoam baffle paint arrester filter	2000	PM	100%	97.5%

EMISSIONS

UNCONTROLLED POTENTIAL EMISSIONS				
ID	Pollutant	lb/hr	TPY@ 8760 hours	Method for Estimating Emissions
01	Ethylbenzene (H, T, V)	0.34	1.49	MSDS and engineering calculations.
	Xylene (H, T, V)	1.52	6.66	
	Toluene (H, T, V)	3.25	14.24	
	Glycol Ethers (H, T, V)	2.85	12.48	
	Methanol (H, T, V)	0.94	4.12	
	MEK (T, V)	3.21	14.06	
	MIBK (H, T, V)	0.45	1.97	
	Naphthalene (H, T, V)	0.13	0.57	
	1,6-Hexamethylene Diisocyanate (H, T, V)	0.0053	0.023	
	Toluene 2,4 Diisocyanate (H, T, V, 112r)	0.0053	0.023	
	Formaldehyde (H, T, V, 112r)	0.0009	0.0039	
	Dimethyl Phthalate (H, T, V)	0.198	0.87	
	Cumene (H, T, V)	0.13	0.57	
	Styrene (H, T, V)	0.65	2.85	
	Ethylene Glycol (H, T, V)	0.18	0.79	
	Phosphoric Acid (T)	0.0017	0.0074	
	Nickel (T, H)	0.0001	0.00044	
	Chromium (+6) (H, T)	0.0011	0.0048	
	Chlorobenzene (H, T, V)	0.014	0.06	
	Cobalt (H, T)	0.0000016	7e-06	
	Lead (H)	0.0062	0.027	
	PM	0.28	1.23	



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ACTUAL or CONTROLLED POTENTIAL EMISSIONS

ID	Pollutant	lb/hr	TPY @ 8760 hours	Method for Estimating Emissions
01	PM	0.007	0.031	MSDS and Engineering Calculations

FACILITY WIDE EMISSIONS

Pollutant	Uncontrolled Emissions	Controlled Emissions
	TPY	TPY
Ethylbenzene (H, T, V)	1.49	---
Xylene (H, T, V)	6.66	---
Toluene (H, T, V)	14.24	---
Glycol Ethers (H, T, V)	12.48	---
Methanol (H, T, V)	4.12	---
MEK (T, V)	14.06	---
MIBK (H, T, V)	1.97	---
Naphthalene (H, T, V)	0.57	---
1,6-Hexamethylene Diisocyanate (H, T, V)	0.023	---
Toluene 2,4 Diisocyanate (H, T, V, 112r)	0.023	---
Formaldehyde (H, T, V, 112r)	0.0039	---
Dimethyl Phthalate (H, T, V)	0.87	---
Cumene (H, T, V)	0.57	---
Styrene (H, T, V)	2.85	---
Ethylene Glycol (H, T, V)	0.79	---
Phosphoric Acid (T)	0.0074	---
Nickel (T, H)	0.00044	---
Chromium (+6) (H, T)	0.0048	---
Chlorobenzene (H, T, V)	0.06	---
Cobalt (H, T)	7e-06	---
Lead (H)	0.027	---
PM	1.23	0.031
Total VOC	60.7	---
Single Greatest HAP	14.24	---
Total HAPs	60.8	---

PROJECT REGULATORY APPLICABILITY REVIEW

Regulation	Applicable		Comments
	Yes	No	
South Carolina Regulation 61-62.1 through 62.99: Air Pollution Regulations (PROJECT ONLY)			
Section II(E): Synthetic Minor	<input type="checkbox"/>	<input checked="" type="checkbox"/>	This is not a synthetic minor construction permit.
Section II(G): Conditional Major	<input checked="" type="checkbox"/>	<input type="checkbox"/>	This facility is a conditional major facility has limits of less than 10 TPY of a single HAP, and less than 25 TPY of total HAPs.
Standard 1: Fuel Burning Operations	<input type="checkbox"/>	<input checked="" type="checkbox"/>	This facility has no fuel burning sources.



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Regulation	Applicable		Comments														
	Yes	No															
South Carolina Regulation 61-62.1 through 62.99: Air Pollution Regulations (PROJECT ONLY)																	
Standard 2: Ambient Air Quality Standards	<input checked="" type="checkbox"/>	<input type="checkbox"/>	This facility has demonstrated compliance through modeling; see modeling summary dated 2/24/04. The facility has been limited to a 8 hr/day operational restriction, to ensure compliance with the modeled emission rates.														
Standard 3: Waste Combustion/Reduction (state only)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	This process does not contain waste combustion or reduction sources														
Standard 3.1: HMI Waste Incinerators	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No medical waste incineration														
Standard 4: Emissions from Process Industries	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The following emission sources have opacity limits (including any fugitives) and Particulate Matter (PM) allowable emissions rates (based on a process weight rate in tons per hour) imposed by this standard:														
			<table><tr><th>ID</th><th>Opacity (%)</th><th>PM Allowable (lb/hr)</th><th>Process Weight Rate (tons/hr)</th><th>Uncontrolled PM Emissions (lb/hr)</th><th>Controlled PM Emissions (lb/hr)</th><th>Monitoring</th></tr><tr><td>01</td><td>20</td><td>0.078</td><td>0.0027</td><td>0.28</td><td>0.007</td><td>Maintenance</td></tr></table>	ID	Opacity (%)	PM Allowable (lb/hr)	Process Weight Rate (tons/hr)	Uncontrolled PM Emissions (lb/hr)	Controlled PM Emissions (lb/hr)	Monitoring	01	20	0.078	0.0027	0.28	0.007	Maintenance
			ID	Opacity (%)	PM Allowable (lb/hr)	Process Weight Rate (tons/hr)	Uncontrolled PM Emissions (lb/hr)	Controlled PM Emissions (lb/hr)	Monitoring								
01	20	0.078	0.0027	0.28	0.007	Maintenance											
Standard 5: Volatile Organic Compounds	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The facility was not in existence in 1979 or 1980.														
Standard 5.1: BACT/LAER For VOC (state only)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The facility was built after July 1, 1979. The facility's current potential VOC emissions are 60.79 TPY.														
Standard 5.2: Control of Oxides of Nitrogen	<input type="checkbox"/>	<input checked="" type="checkbox"/>	This source does not emit any NOx.														
Standard 7: Prevention of Significant Deterioration	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The facility's PTE for any pollutant is less than 250 TPY; therefore the facility is not major for PSD.														
Standard 7(II): Minor Source Increment Analysis	<input checked="" type="checkbox"/>	<input type="checkbox"/>	This facility has demonstrated compliance through modeling; see modeling summary dated 2/24/04. The facility has been limited to a 8 hr/day operational restriction, to ensure compliance with the modeled emission rates.														
Standard 7.1: Standards for Non Attainment Areas	<input checked="" type="checkbox"/>	<input type="checkbox"/>	This facility is not located in a non-attainment area.														
Standard 8: Toxic Air Pollutants (state only)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	This facility has demonstrated compliance through modeling; see modeling summary dated 2/24/04. The facility has been limited to a 8 hr/day operational restriction, to ensure compliance with the modeled emission rates.														
Regulation 61-62.6: Control of Fugitive Particulate Matter	<input type="checkbox"/>	<input checked="" type="checkbox"/>	This facility does not have fugitive PM (Dust) emissions.														
Regulation 61-62.60: SC Designated Facility Plan and NSPS	<input type="checkbox"/>	<input checked="" type="checkbox"/>	This process does not contain sources subject to this standard.														
Regulation 61-62.61: NESHAP	<input type="checkbox"/>	<input checked="" type="checkbox"/>	This facility does not emit the pollutants subject to this standard														
Regulation 61-62.63: NESHAP For Source Categories	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The facility's PTE for single HAP or total HAPs is greater than 10 TPY and 25 TPY, respectively. However, the facility does contain the following emission sources that are subject to the following 112(g) Synthetic Minor Emission Limitations:														
			<table><tr><th>OP ID</th><th>CP ID</th><th>Equipment ID</th><th>CP Issue Date</th><th>Public Notice Date</th></tr><tr><td>Facility Wide</td><td>CB</td><td>Paint Booth No.1</td><td>5/3/04</td><td>4/1/04</td></tr></table>	OP ID	CP ID	Equipment ID	CP Issue Date	Public Notice Date	Facility Wide	CB	Paint Booth No.1	5/3/04	4/1/04				
			OP ID	CP ID	Equipment ID	CP Issue Date	Public Notice Date										
Facility Wide	CB	Paint Booth No.1	5/3/04	4/1/04													



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South Carolina Regulation 61-62.1 through 62.99: Air Pollution Regulations (PROJECT ONLY)															
Regulation 61-62.68: Chemical Accident Prevention	<input type="checkbox"/>	<input checked="" type="checkbox"/>	This process does not store or use chemicals subject to 112(r) above the threshold quantities.												
Regulation 61-62.70: Title V	<input type="checkbox"/>	<input checked="" type="checkbox"/>	This facility is major for single HAPs (Toluene, Glycol Ethers and MEK) and total HAPs. As such, the facility has taken facility wide federally enforceable emission limitations to be a Conditional Major facility (once the synthetic minor construction permit has been issued).												
			<table><tr><th>CP ID</th><th>Equipment ID</th><th>CP Issue Date</th><th>Public Notice Date</th><th>Emission Limitation (TPY)</th><th>Compliance Method</th></tr><tr><td>CB</td><td>(Facility Wide) Paint Booth No.1</td><td>On Public Notice</td><td>On Public Notice</td><td><10 TPY single HAP; <25 TPY total HAP</td><td>Monthly Recordkeeping; Annual Reporting</td></tr></table>	CP ID	Equipment ID	CP Issue Date	Public Notice Date	Emission Limitation (TPY)	Compliance Method	CB	(Facility Wide) Paint Booth No.1	On Public Notice	On Public Notice	<10 TPY single HAP; <25 TPY total HAP	Monthly Recordkeeping; Annual Reporting
			CP ID	Equipment ID	CP Issue Date	Public Notice Date	Emission Limitation (TPY)	Compliance Method							
CB	(Facility Wide) Paint Booth No.1	On Public Notice	On Public Notice	<10 TPY single HAP; <25 TPY total HAP	Monthly Recordkeeping; Annual Reporting										
Regulation 61-62.72: Acid Rain	<input type="checkbox"/>	<input checked="" type="checkbox"/>	This facility does not have any sources subject to Acid Rain.												
Regulation 61-62.96: Nitrogen Oxides (NO _x) Budget Trading Program	<input type="checkbox"/>	<input checked="" type="checkbox"/>	This regulation is not applicable.												
Regulation 61-62.99: Nitrogen Oxides (NO _x) Budget Program Requirements for Stationary Sources Not In the Trading Program	<input type="checkbox"/>	<input checked="" type="checkbox"/>	This regulation is not applicable.												
Other	<input type="checkbox"/>	<input checked="" type="checkbox"/>	N/A												

PROJECT REGULATORY APPLICABILITY REVIEW

Regulation	Applicable		Comments										
	Yes	No											
Federal Regulations (PROJECT ONLY)													
NSPS (Part 60) Subpart(s)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	This process does not contain sources subject to this standard.										
NESHAP (Part 61) Subpart(s)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	This facility does not emit the pollutants subject to this standard										
MACT (Part 63) Subpart(s)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The facility's PTE for single HAP or total HAPs is greater than 10 TPY and 25 TPY, respectively. However, the facility does contain the following emission sources that are subject to the following 112(g) Synthetic Minor Emission Limitations:										
			<table><tr><th>OP ID</th><th>CP ID</th><th>Equipment ID</th><th>CP Issue Date</th><th>Public Notice Date</th></tr><tr><td>Facility Wide</td><td>CB</td><td>Paint Booth No.1</td><td>5/3/04</td><td>4/1/04</td></tr></table>	OP ID	CP ID	Equipment ID	CP Issue Date	Public Notice Date	Facility Wide	CB	Paint Booth No.1	5/3/04	4/1/04
			OP ID	CP ID	Equipment ID	CP Issue Date	Public Notice Date						
Facility Wide	CB	Paint Booth No.1	5/3/04	4/1/04									
Area Source Standards (Part 63) Subpart(s)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	This facility is subject to Subpart HHHHHH, Miscellaneous Surface Coating (Plastic Parts and Auto body Refinishing Paint Shops)										
Compliance Assurance Monitoring (CAM) (Part 64)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	This is not a Title V facility.										

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	Yes	No	
Federal Regulations (PROJECT ONLY)			
Other	<input type="checkbox"/>	<input type="checkbox"/>	N/A

SUMMARY AND CONCLUSIONS

It has been determined that this source, if operated in accordance with the submitted application, will meet all applicable requirements and emission standards.

draft